

REMARKS

Status of Claims

Claims 1-78 are currently pending. Claims 6-7, 10-16, 18, 24-29, and 66-78 are cancelled by the present Amendment. Claims 55-65 are withdrawn. New claims 79-81 are added. Support for new claims 79-81 can be found in original claims 73, 75, and 77. No new matter has been added. A clean version of the amended claims is provided as **Appendix A** for the Examiner's convenience.

Applicant has amended claims 1-5, 8-9, 17, 19-23, 30-34, 36-41, 43-47, 49-53, and 55-65. In particular, Applicant has amended claim 1 to recite a "method comprising photochemically generating an oxidopyrylium species from a 3-hydroxychromone derivative; and performing a cycloaddition reaction between the oxidopyrylium species and a dipolarophile to form a cycloadduct." Claims 2-5, 8-9, 17, 19-23, and 30-54 depend directly or indirectly from claim 1 and are drawn to the generation of oxidopyrylium species and subsequent chemical reaction with different substrates and/or reagents.

Claim Rejections

The Examiner rejected claims 1-9 and 65-78 under 35 U.S.C. §§ 101 and 112. Applicant respectfully submits that the amendments to the claims obviate these rejections. Applicant requests that the rejections be removed.

Restriction Requirement

The Examiner subjected claims 10-64 to a Restriction Requirement, stating that the application contains "inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1." To support this assertion, the Examiner stated that "oxidopyrylium species is not a contribution over the prior art as such species and their cycloaddition has been taught." Applicant respectfully disagrees. The Examiner cites two references, Mandal et al., *J. Phys. Chem. A* **2003**, 107, 6334-6339 (hereinafter "Mandal"), and Sammes et al., *J. Chem. Soc. Perkin Trans. I* **1993**, 1261-1265 (hereinafter "Sammes"). Sammes teaches the thermal generation of oxidopyrylium species. Mandal describes the photochemical

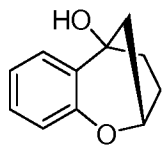
generation and characterization of oxidopyrylium species. Neither Mandal nor Sammes describe the claimed method of using a photochemically generated oxidopyrylium species in a cycloaddition reaction with a dipolarophile.

A group of inventions is considered linked to form a single general inventive concept where there is a technical relationship among the inventions that involves at least one common or corresponding special technical feature. The expression “special technical feature” is defined as meaning the technical feature that defines the contribution which each claimed invention, considered as a whole, makes over the prior art. See MPEP 1893.03(d). Applicant respectfully submits that claims 1-5, 8-9, 17, 19-23, and 30-54 comprise the same special technical feature of a photochemical generation of an oxidopyrylium species and subsequent reaction with a dipolarophile, and that a lack of unity of invention requirement is therefore improper with respect to these claims.

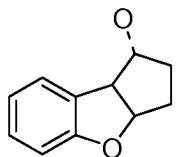
In order to be responsive to the Restriction Requirement, Applicant elects **Group 1**, drawn to a method of generating oxidopyrylium species. The claims readable on the elected group are claims 1-5, 8-9, and 17. This election is made with traverse. Indeed, for the reasons cited above, Applicant respectfully submits that the Examiner has not met his burden of showing a lack of a single general inventive concept with regard to claims 1-5, 8-9, 17, 19-23, and 30-54. Applicant therefore respectfully requests that Group 2 (claims 19-23), Group 3 (claims 19, 30-36), Group 4 (claims 19, 37-48), and Group 5 (claims 19, 49-54), be rejoined with elected Group 1.

Applicant has withdrawn claims 55-64 (Groups 6-8), drawn to compounds. Applicant notes that, due to rejections under 35 U.S.C. §§ 101 and 112, the Examiner did not consider original claims 65-78 in the Restriction Requirement. Applicant has amended claim 65, cancelled claims 66-78, and presents new claims 79-81 which should be withdrawn as directed to non-elected inventions. In view of these amendments, Applicant proposes that the following additional groups be added to the Restriction Requirement, and requests that the Examiner acknowledge the same:

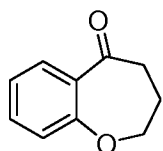
Group 9, claim 65 (in part), drawn to a medicament comprising a compound of core structure:



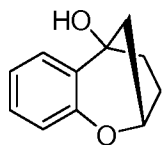
Group 10, claim 65 (in part), drawn to a medicament comprising a compound of core structure:



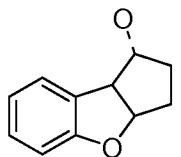
Group 11, claim 65 (in part), drawn to a medicament comprising a compound of core structure:



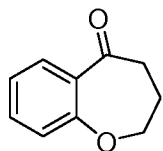
Group 12, claim 79 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more cancers or cancerous conditions a compound of core structure:



Group 13, claim 79 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more cancers or cancerous conditions a compound of core structure:

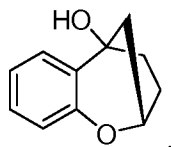


Group 14, claim 79 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more cancers or cancerous conditions a compound of core structure:

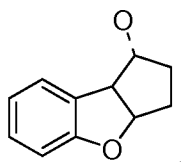


Group 15, claim 80 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more conditions associated with cellular proliferation a compound of core

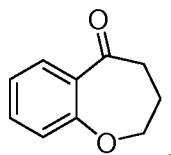
structure:



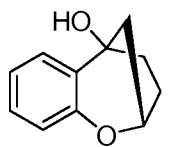
Group 16, claim 80 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more conditions associated with cellular proliferation a compound of core structure:



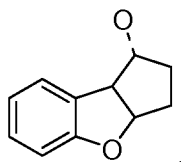
Group 17, claim 80 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more conditions associated with cellular proliferation a compound of core structure:



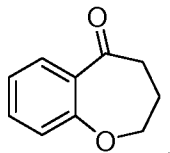
Group 18, claim 81 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more NF-κB-dependent conditions a compound of core structure:



Group 19, claim 81 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more NF-κB-dependent conditions a compound of core structure:



Group 20, claim 81 (in part), drawn to a method of administering to a subject suffering from or susceptible to one or more NF-κB-dependent conditions a compound of core structure:



Conclusion

Applicant would like to thank the Examiner for his time and consideration of this case. If a telephone conversation would help clarify any issues, or help expedite prosecution of this case, Applicant invites the Examiner to contact the undersigned at (617) 248-4793.

Additionally, please charge any fees that may be required or credit any overpayment to our Deposit Account 03-1721 under Order No. 0079571-0110.

Respectfully submitted,

Dated: August 10, 2009

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